From: Covington, Tayler

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Subject: News Clips

# **News Clips**

# Region 2

Op-Ed: Underneath NJ — an Unhealthy, Costly, Disgusting Problem (NJ SPOTLIGHT; May 15, 2017)

Underneath New Jersey, we have a festering problem. Because we cannot see it, we are less inclined to discuss it. But it is there. This problem is unhealthy, costly, and frankly, downright disgusting. This problem is that we have thousands of miles of century-old water and sewer lines whose shelf life is set to expire any day. If that happens, we, the residents of New Jersey, are in for big trouble.

Hoosick Falls receives grant to help with PFOA costs (TROY RECORD; May 15, 2017)

Mayor Robert Allen said that his administration has been working hard at finding alternative ways for the village to pay for PFOA related costs.

Zika-related microcephaly lands in the USVI (VI DAILY NEWS; May 13, 2017)

The first child with Zika-related microcephaly has been born in the territory, V.I. Health Department officials said Friday.

DOH Reports V.I.'s First Zika-Related Microcephaly Case (ST. CROIX SOURCE; May 12, 2017)

The Centers for Disease Control has confirmed the U.S. Virgin Island's first case of Zika-related microcephaly, the V.I. Department of Health reported Friday.

State moves to tighten rules on dry cleaning chemicals (ALBANY TIMES-UNION; May 12, 2017)

The state is proposing changes to rules for dry cleaners for the first time in 20 years that are aimed at reducing potential leaks of a carcinogenic dry cleaning chemical.

# **National News**

A Strong Case Against a Pesticide Does Not Faze E.P.A. Under Trump (THE NEW YORK TIMES; May 15, 2017)

Some of the most compelling evidence linking a widely used pesticide to developmental problems in children stems from what scientists call a "natural" experiment. Though in this case, there was nothing natural about it.

Under Fire, Climate Scientists Unite With Lawyers to Fight Back (THE NEW YORK TIMES; May 15, 2017)

Lawyers and scientists do not always get along, but some are now finding common cause in an effort to defend the integrity of science — especially climate science — in government and academia.

US Northeast states are devouring natural gas for electricity, and that's a problem for coal (CNBC; May 14, 2017)

The Northeast U.S. states — a vast market that generates and consumes much of America's annual electricity — is gradually using less coal to fire up its electricity plants.

Greens to meet with White House on WOTUS (GREENWIRE; May 15, 2017)

White House officials will meet with environmental groups this week and next to hear arguments for keeping the contentious Clean Water Rule in place.

Flawed diesel engine testing takes deadly toll — study (GREENWIRE; May 15, 2017)

Diesel-powered cars and trucks spew millions of tons more nitrogen oxides than allowable standards, leading to tens of thousands of premature deaths worldwide each year, researchers conclude in a study published today.

Utilities Invoke 2016 Ash Law In Call For EPA To Reconsider Disposal Rule (INSIDE EPA; May 15, 2017)

The utility sector is calling on EPA to reconsider its first-time rule governing coal ash disposal by saying a 2016 law that overhauled enforcement of the policy justifies reconsidering many of its technical mandates, but environmentalists counter that such changes would contradict Congress' decision to leave the rule's substantive provisions in place.

Trump Taps Bodine, An Experienced Hand, To Lead EPA Enforcement Office (INSIDE EPA; May 14, 2017)

President Donald Trump announced late May 12 his intent to nominate former EPA waste chief Susan Bodine to lead the agency's enforcement office, tapping a Washington policy expert to provide key experience to Administrator Scott Pruitt's team and help advance several of Pruitt's priorities, including speeding Superfund cleanups and possibly returning some enforcement roles to agency program offices.

Defying Trump, these state leaders are trying to impose their own carbon taxes (WASHINGTON POST; May 12, 2017)

While the Trump administration continues to consider a withdrawal from the Paris agreement, climate action in the United States is increasingly falling to the state and local level. And now, a handful of states, mainly clustered in New England, are turning to the concept of carbon pricing with a renewed sense of urgency.

Utilities group petitions EPA head to upend coal ash rule (WASHINGTON POST, AP; May 12, 2017)

A utilities group asked the Environmental Protection Agency on Friday to sweep away rules governing the disposal of the poison-laden ash left behind when coal is burned to generate electricity.

# **Full Articles**

Region 2 News

Op-Ed: Underneath NJ — an Unhealthy, Costly, Disgusting Problem

What we need right now is a comprehensive strategy for improving our water and sewer infrastructure

By Robert Briant, Jr.

May 15, 2017

Underneath New Jersey, we have a festering problem. Because we cannot see it, we are less inclined to discuss it. But it is there. This problem is unhealthy, costly, and frankly, downright disgusting. This problem is that we have thousands of miles of century-old water and sewer lines whose shelf life is set to expire any day. If that happens, we, the residents of New Jersey, are in for big trouble.

There has been more and more news about our water and sewer infrastructure over the past few months. But that is only because the problems continue to get worse. What New Jersey needs right now is a comprehensive strategy for improving our water and sewer infrastructure to ensure we deliver clean water to the men, women, children, and businesses of our state.

This crisis has already emerged in areas across New Jersey. Newark has had several dozen schools whose water lead concentration level tested above 15 parts per billion. That is the level at which the federal Environmental Protection Agency recommends corrective action be taken. In Camden, there are schools whose water fountains have been shut down for years. Students and staff instead must use bottled water machines. It costs the school district \$75,000 a year just to provide bottled water and cups.

Last year, I wrote about these problems and said it "is not hyperbolic to say that more situations like those in Newark and Camden will occur if we don't act now."

Unfortunately, I was correct. Since then, high lead levels have been found in the drinking water at Rowan University, Morristown Medical Center, and Englewood Hospital. And those are just a few examples. It seems as if every day we hear about a new school or public venue that has tested positive for high levels of lead.

These examples also show that this problem is not just relegated to our urban centers. In 2014, the state Department of Health found that hundreds of water systems throughout the state had traces of arsenic or nitrates in the water. The Centers for Disease Control and Prevention notes Salem, Cumberland, Essex, and Mercer Counties had the highest numbers of children impacted by lead poisoning.

It might seem obvious, but the health risks of lead in drinking water are extremely serious. As the World Health Organization notes, "Young children are particularly vulnerable to the toxic effects of lead and can suffer profound and permanent adverse health effects, particularly affecting the development of the brain and nervous system."

When aging infrastructure is not poisoning our drinking water, it is creating havoc and waste. Numerous New Jersey municipalities have water mains — which deliver treated drinking water — leaking so badly that up to 60 percent of the treated water never

reaches customers. The National Resources Defense Council estimates that 130 million gallons of treated drinking water are being lost each day in New Jersey because of leaky, outdated infrastructure. Think of the wasted money and resources piling up every day due to our failure to address this problem.

I noted earlier that this problem — in addition to being unhealthy and costly — is disgusting. What did I mean by that? Well, our sewer systems are so old and outdated that in many areas across the state, even a light rainfall can result in raw sewage washing into waterways like the Passaic River and Raritan Bay. NJ Future estimates that seven billion gallons of diluted raw sewage flows in our rivers and bays each year.

I am proud to chair the Clean Water Construction Coalition, which helps focus national attention on the need for federal legislation to improve water and wastewater infrastructure. We need this type of legislation nationwide. But we also need a focus here in New Jersey on how to solve this problem. As the days go by, we are only going to discover more and more problems before we come to a point of catastrophe. Let's not wait for that day. Let's act now.

#### TROY RECORD

#### Hoosick Falls receives grant to help with PFOA costs

By Nicolas Buonanno

May 15, 2017

Mayor Robert Allen said that his administration has been working hard at finding alternative ways for the village to pay for PFOA related costs.

With that work in place since the new village administration took over in April, the New York State Environmental Facilities Corp. recently awarded the Village of Hoosick Falls \$220,000 to help cover costs associated with the discovery of the toxic chemical, PFOA, in the municipal water supply. Village officials are also still working together to negotiate new settlement agreements with the companies accused of polluting the village's water supply, Saint-Gobain Performance Plastics and Honeywell International, the previous village administration under former Mayor David Borge voted twice to table two separate settlement agreements, after hearing much public outcry about the deals not being sufficient enough.

The previous administration first voted to table a \$850,000 settlement agreement between the village and the companies and they then voted to table a revised agreement worth 1.045 million.

"After the second settlement was tabled, the village immediately started looking for avenues to pay the bills," Allen said. "After discussions with members of the Cuomo Administration, the EFC was brought in to see what could be worked out. Based on the type of costs, the EFC was able to give the Village \$220,000"

Perfluorooctanoic acid had been used in the village for decades in the manufacturing of products such as non-stick cookware and electrical insulation before the federal Environmental Protection Agency stepped in during 2006 and reached an agreement with several manufacturing giants, including DuPont Co., to virtually eliminate use of the substance. Chronic exposure to PFOA has been linked to testicular cancer, kidney cancer, thyroid disease, high cholesterol, ulcerative colitis and pregnancy-induced hypertension. Studies suggest other possible health consequences, including a connection to pancreatic cancer.

While the water supply continues to have no detection of PFOA thanks to the permanent GAC Filtration System, there is still more work to be done. Among that work is finding a way to pay for various costs incurred because of the water situation. One of those costs was engineering work provided by MRB Group.

Based on the terms of the agreement, if the Village receives financial restitution from the companies responsible, it would pay back the EFC. Allen said there are no interest charges or time limit with this agreement.

"This has given immediate relief to our residents and us. Our small village does not have vast financial resources, and I'd personally like to thank Governor Cuomo and the EFC for their assistance," said Allen.

The Village of Hoosick Falls is also still working for solutions to pay nearly \$1 million in legal and engineering costs, as well as losses in the water department. Among the expenses, the village has incurred over \$100,000 that was owed to MRB Group and the \$220,000 awarded funds will help pay off that debt.

"This money has finally allowed us to pay our engineering firm, the MRB Group," said Allen. "They have done tremendous work on behalf of Village, and it was my pleasure to personally give that check to them at our May Board Meeting."

Ryan Colvin, president of MRB Group, said in a statement that his team trusts Allen's administration and will continue to assist the village.

"On behalf of MRB Group, we appreciate Mayor Rob Allen's praise and kind words, but more importantly his trust in our team's expertise and capability," Colvin said in a statement. "The entire MRB Group consulting and engineering team has enjoyed working with the Village and is proud to have played a role in addressing the significant health threat caused by the PFOA drinking water contamination. We are grateful for the opportunity to continue to assist the Village in addressing this extremely important issue as well as the current and future needs of the Hoosick Falls community."

Allen said him and the Board of Trustees are continuing to seek solutions that impact local taxpayers as minimally as possible. The mayor and board are concurrently working together with the state's Department of Environmental Conservation and the Department of Health as they continue to pursue a new water source, protect the health of residents and advance the economic development of the Village.

#### VIRGIN ISLANDS DAILY NEWS

# Zika-related microcephaly lands in the USVI

By Brian O'Connor

May 13, 2017

The first child with Zika-related microcephaly has been born in the territory, V.I. Health Department officials said Friday.

Officials are not disclosing the date of birth or the hospital where the birth took place, citing confidentiality concerns. They are also not disclosing which island the child was born on for the same reason, said V.I. Health Commissioner Michelle Davis.

Health officials also have reported one pregnancy that did not come to term as a result of Zika-related birth defects, Davis said.

Health officials already had been preparing for the case for some time, Davis said.

"We didn't know how many cases we were going to receive, but we knew were going to receive some," she said.

Microcephaly is a birth defect in which a baby's head is much smaller than normal. According to the Centers for Disease Control and Prevention, it can result in developmental delays, intellectual disability, movement and balance problems, feeding problems, hearing loss and vision problems. The problems can range from mild to severe, and often last for the child's entire life.

At this point in the spread of Zika virus in this hemisphere, health officials have enough information to provide a statistical range of the incidents of microcephaly, said territorial epidemiologist Esther Ellis.

"There is a paper that was published last month," she said. "It showed a 1 to 10 percent rate of microcephaly for pregnant women infected with the Zika virus."

A pregnant woman who suffers a Zika infection during pregnancy has a 90 to 99 percent chance that her child will be born without microcephaly, Ellis said.

That rate does not take into account possible other birth defects that may occur in children born to Zika-infected mothers, Davis said. According to the CDC, those can include brain damage, damage to the back of the eye, joints with limited range of motion, and too much muscle tone restricting body movement soon after birth.

The best way to monitor those other defects is through repeated checkups in infants, Davis said. To that end, territorial officials will be recruiting specialists including audiologists, ophthalmologists, perinatologists, neonatologists, and other specialists, Davis said.

"We've been gearing up," she said.

The territory has reported 105 cases of infants born to women who tested positive for Zika, Ellis said. That puts the territory at the lowest end of the range so far, Ellis said.

While Zika has been linked with higher rates of microcephaly in countries where it emerged such as Brazil — Zika is not the only cause of microcephaly, and microcephaly is not new to the territory. Health officials estimate that six cases of microcephaly have been reported in the territory in the last five years, said Andrew Beron, the Health Department's Zika Pregnancy Registry coordinator.

Beron's program tracks the information of pregnant women who test positive for Zika up to a year after their child is born. The

department has been testing all pregnant women, and Beron's figures are part of the CDC's U.S. Zika Pregnancy Registry.

Given the high role that chance plays in whether or not a Zika-infected mother gives birth to a child with microcephaly, Ellis said territorial health officials cannot exactly take credit for the territory being at the low end of the microcephaly rate, but she, like other health officials interviewed for this article, touted the department's preventative measures, including free Zika testing for pregnant women, including ultrasounds.

"In the last year, we've conducted 10,000 vector control inspections and treatments of homes and public hospitals," she said.

The vector control issue typically involves three measures, said Brett Ellis, the Department's Laboratory director, who works with an entomologist to coordinate the response.

The first measure is source reduction — essentially removing water from containers and other sources of potential breeding for the aedes mosquitoes that spread the disease. In cases where the water cannot be emptied — such as cisterns — vector control officials employ bacteria to kill mosquito larva, Brett Ellis said.

The Health Department also deploys a more traditional mosquito spray from a backpack, administered up to 150 meters from the home, Brett Ellis said.

"We took a pretty conservative approach," he said.

Officials already had moved into Phase II of the response to the Zika outbreak, which entails providing access to specialized services for children born with Zika-related health defects, Davis said.

Ultimately, the first Zika-related microcephaly case in the territory was not a defeat, Davis said.

"We don't see this as a defeat at all," she said. "Out of the 232 Zika-positive pregnant women in the territory, we've only had one infant that has been born with this birth defect and one fetal loss. I think we're doing very well in terms of our prevention."

More information about Zika and the Health Department's response is available online at http://doh.vi.gov/topics/az/z/zika.html.

#### ST. CROIX SOURCE

DOH Reports V.I.'s First Zika-Related Microcephaly Case

By Source Staff

May 12, 2017

The Centers for Disease Control has confirmed the U.S. Virgin Island's first case of Zika-related microcephaly, the V.I. Department of Health reported Friday.

"We are saddened to report this case; however, we are not surprised due to the high rate of local transmission in the territory," Commissioner of Health, Michelle S. Davis said in a Friday news release. "The DOH stands ready to provide services to women, infants and families affected by the Zika virus. Although one case is too many, we must continue to remain vigilant in preventing infection through mosquito bites and unprotected sex; especially to pregnant women."

Microcephaly, a condition in which a baby's head is much smaller than expected, is a sign of incomplete brain development, the DOH explained.

"During pregnancy, a baby's head grows because the baby's brain grows. Microcephaly can occur because a baby's brain has not developed properly during pregnancy or has stopped growing after birth, which results in a smaller head size," the DOH said.

Since the DOH began tracking in January 2016, the department has followed 2,119 reported cases, of which 1,026 tested positive for the mosquito-born virus. Of those, 1,860 were pregnant women, and 232 tested positive.

The DOH news release did not specify which island the microcephaly case was on.

The department reminded Virgin Islanders that avoiding mosquito bites is the best way to prevent getting Zika. This can be accomplished by following the mantra of "Dress, Drain, Defend."

- Dress: Wearing long sleeved shirts, long pants;
- Drain: Eliminating standing water in and outside of the home; and

- Defend: Using repellents, bed nets, condoms, and screens on windows and doors.

"You can call our Zika Hotline for any questions regarding Zika prevention or learn more about our free services for pregnant women. The number is 340-712-6205," the news release said.

Though typically a mild infection in adults, Zika virus infection can cause a pattern of severe birth defects known as Congenital Zika Syndrome when passed from pregnant women to their unborn children. These birth defects include microcephaly, developmental disabilities, and vision problems. Clinical representatives from the Department of Health have met with physicians, pathologists, midwives, hospital administrators, maternal-child health nurses, and medical flight crews to discuss the current state of the Zika virus outbreak in USVI and the potential risk of Zika virus infection to pregnant women and their infants.

The DOH has strongly urged pregnant women to take steps to prevent mosquito bites and protect themselves from sexual transmission of Zika throughout their entire pregnancy. Anyone who is pregnant and showing symptoms of Zika, such as a fever, rash, red eyes, joint/muscle pain or headache, should immediately talk to her doctor or healthcare provider, the department said.

There is no vaccine or medicine for Zika. Zika is spread to people primarily through the bite of an infected mosquito. A pregnant woman can pass Zika to her fetus during pregnancy or around the time of birth. Men and women with Zika can pass it to their partners through sexual contact.

The department's Emergency Operations Center can answer questions about Zika or make available free services. Those interested can 340-712-6205 or visit online at http://doh.vi.gov.

#### **ALBANY TIMES-UNION**

State moves to tighten rules on dry cleaning chemicals

Looks to protect public from leaking toxic dry cleaning chemicals

By Brian Nearing

May 12, 2017

The state is proposing changes to rules for dry cleaners for the first time in 20 years that are aimed at reducing potential leaks of a carcinogenic dry cleaning chemical.

Rules proposed by the state Department of Environmental Conservation target the use of perchloroethylene (PCE, also known as "perc"), a cleaning solvent that the U.S. Environmental Protection Agency said can cause cancer. The rules would build on federal requirements that older dry cleaning machines that use PCE no longer be used after December 2021.

Dry cleaners that use perc in newer, so-called "fourth generation" machines will have to perform regular monthly leak tests and immediately repair or replace machines that don't pass.

The chemical is used at more than 2,000 dry cleaners across the state. The latest model perc-based machines with tighter emission controls can cost between \$32,000 and \$100,000 depending on the size.

In December 2020, the rules will ban perc machines at dry cleaners located in buildings where people also live; that would apply to 315 cleaners, 290 of which are in New York City.

Environmental groups and the industry both welcomed the proposed rules.

There are relatively few older perc machines still being used, and those ought to be replaced, said Alan Spielvogel, director of technical services for the National Cleaners Association, a New York City-based trade group. He said the state did not impose an outright ban on perc, which was being considered last fall.

He said the industry sees the rules as fair and reasonable. The newly required testing machinery will cost about \$400, with monthly test kits costing another \$7, according to DEC.

"A key part of protecting public health is making sure the standards we have to limit people's exposure to likely cancer agents such as perchloroethylene are up-to-date," said Caitlin O'Brien, environmental health associate at Environmental Advocates of New York. "We are glad that the Cuomo administration is advancing this proposal to modernize our regulations and lower the public's exposure to this dangerous chemical."

Perc contamination in the ground and groundwater around dry cleaners is a widespread problem in the state. There are 645 former

or current dry cleaners where the state Department of Environmental Conservation has found perc pollution, and that have either been cleaned up or await cleanup, according to DEC figures.

In Albany, Rensselaer and Schenectady counties, there are five dry cleaners that use perc, according to DEC. Another 26 use alternative cleaning chemicals, and another dozen are shops where clothes are taken to another location for cleaning. Another 21 locations are shut down.

Perc cleanups are usually required before former dry cleaner sites can be redeveloped. For example, the owner of a perc-polluted former Rensselaer dry cleaners will install a venting system to contain toxic vapors leaking out of the ground, under a plan announced last month by DEC.

# National News THE NEW YORK TIMES

A Strong Case Against a Pesticide Does Not Faze E.P.A. Under Trump

By Roni Caryn Rabin

May 15, 2017



Chlorpyrifos is still on the market as an agricultural pesticide, routinely sprayed on common crops like apples, oranges, strawberries and broccoli. Credit Gerry Broome/Associated Press

Some of the most compelling evidence linking a widely used pesticide to developmental problems in children stems from what scientists call a "natural" experiment.

Though in this case, there was nothing natural about it.

Chlorpyrifos (pronounced klor-PYE-ruh-fahs) had been used to control bugs in homes and fields for decades when researchers at Columbia University began studying the effects of pollutants on pregnant mothers from low-income neighborhoods. Two years into their study, the pesticide was removed from store shelves and banned from home use, because animal research had found it caused brain damage in baby rats.

Pesticide levels dropped in the cord blood of many newborns joining the study. Scientists soon discovered that those with comparatively higher levels weighed less at birth and at ages 2 and 3, and were more likely to experience persistent developmental delays, including hyperactivity and cognitive, motor and attention problems. By age 7, they had lower IQ scores.

The Columbia study did not prove definitively that the pesticide had caused the children's developmental problems, but it did find a dose-response effect: The higher a child's exposure to the chemical, the stronger the negative effects.

That study was one of many. Decades of research into the effects of chlorpyrifos strongly suggests that exposure at even low levels

may threaten children. A few years ago, scientists at the Environmental Protection Agency concluded that it should be banned altogether.

Yet chlorpyrifos is still widely used in agriculture and routinely sprayed on crops like apples, oranges, strawberries and broccoli. Whether it remains available may become an early test of the Trump administration's determination to pare back environmental regulations frowned on by the industry and to retreat from food-safety laws, possibly provoking another clash with the courts.

In March, the new chief of the E.P.A., Scott Pruitt, denied a 10-year-old petition brought by environmental groups seeking a complete ban on chlorpyrifos. In a statement accompanying his decision, Mr. Pruitt said there "continue to be considerable areas of uncertainty" about the neurodevelopmental effects of early life exposure to the pesticide.

Even though a court last year denied the agency's request for more time to review the scientific evidence, Mr. Pruitt said the agency would postpone a final determination on the pesticide until 2022. The agency was "returning to using sound science in decision-making — rather than predetermined results," he added.

Agency officials have declined repeated requests for information detailing the scientific rationale for Mr. Pruitt's decision.

Lawyers representing Dow and other pesticide manufacturers have also been pressing federal agencies to ignore E.P.A. studies that have found chlorpyrifos and other pesticides are harmful to endangered plants and animals.

A statement issued by Dow Chemical, which manufactures the pesticide, said: "No pest control product has been more thoroughly evaluated, with more than 4,000 studies and reports examining chlorpyrifos in terms of health, safety and environment."

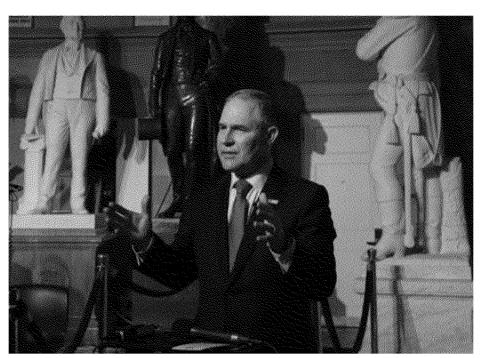
## A Baffling Order

Mr. Pruitt's decision has confounded environmentalists and research scientists convinced that the pesticide is harmful.

Farm workers and their families are routinely exposed to chlorpyrifos, which leaches into ground water and persists in residues on fruits and vegetables, even after washing and peeling, they say.

Mr. Pruitt's order contradicted the E.P.A.'s own exhaustive scientific analyses, which had been reviewed by industry experts and modified in response to their concerns.

In 2015, an agency report concluded that infants and children in some parts of the country were being exposed to unsafe amounts of the chemical in drinking water, and to a dangerous byproduct. Agency researchers could not determine any level of exposure that was safe.



In March, Scott Pruitt, the new administrator of the Environmental Protection Agency, denied a petition brought by environmental groups seeking a complete ban on chlorpyrifos. Credit Stephen Crowley/The New York Times

An updated human health risk assessment compiled by the E.P.A. in November found that health problems were occurring at lower levels of exposure than had previously been believed harmful.

Infants, children, young girls and women are exposed to dangerous levels of chlorpyrifos through diet alone, the agency said. Children are exposed to levels up to 140 times the safety limit.

"The science was very complicated, and it took the E.P.A. a long time to figure out how to deal with what the Columbia study was saying," said Jim Jones, who ran the chemical safety unit at the agency for five years, leaving after President Trump took office.

The evidence that the pesticide causes neurodevelopmental damage to children "is not a slam dunk, the way it is for some of the most well-understood chemicals," Mr. Jones conceded. Still, he added, "very few chemicals fall into that category."

But the law governing the regulation of pesticides used on foods doesn't require conclusive evidence for regulators to prohibit potentially dangerous chemicals. It errs on the side of caution.

The Food Quality Protection Act set a new safety standard for pesticides and fungicides when it was passed in 1996, requiring the E.P.A. to determine that a chemical can be used with "a reasonable certainty of no harm."

The act also required the agency to take the unique vulnerabilities of young children into account and to use a wide margin of safety when setting tolerance levels.

Children may be exposed to multiple pesticides that have the same toxic mechanism of action at the same time, the law noted. They're also exposed through routes other than food, like drinking water.

Environmental groups returned last month to the United States Court of Appeals for the Ninth District, asking that the E.P.A. be ordered to ban the pesticide. The court has already admonished the agency for what it called "egregious" delays in responding to a petition filed by the groups in 2007.

The E.P.A. responded on April 28, saying it had met its deadline when Mr. Pruitt denied the petition.

Erik D. Olson, director of the health program at Natural Resources Defense Council, one of the groups petitioning the E.P.A. to ban chlorpyrifos, disagreed.

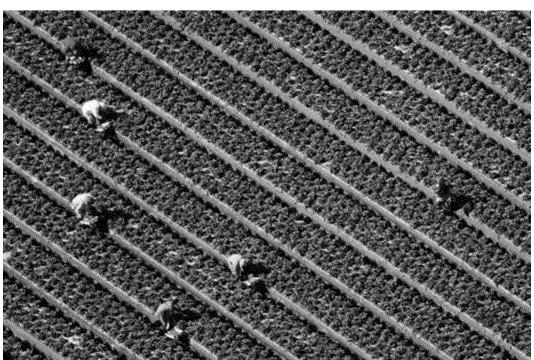
"The E.P.A. has twice made a formal determination that this chemical is not safe," Mr. Olson said. "The agency cannot just decide not to act on that. They have not put out a new finding of safety, which is what they would have to do to allow it to continue to be used."

# **Devastating Effects**

Chlorpyrifos belongs to a class of pesticides called organophosphates, a diverse group of compounds that includes nerve agents like sarin gas.

It acts by blocking an enzyme called cholinesterase, which causes a toxic buildup of acetylcholine, an important protein that carries signals from nerve cells to their targets.

Acute poisoning with the pesticide can cause nausea, dizziness, convulsions and even death in humans, as well as animals.



The use of chlorpyrifos has been declining in California, where farmers have responded to rising demand for organic produce and to concerns about organophosphates. Credit Lucy Nicholson/Reuters, via Newscom

But the scientific question has been whether humans, and especially small children, are affected by chronic low-level exposures that don't cause any obvious immediate effects — and if so, at what threshold these exposures cause harm.

Scientists have been studying the impact of chlorpyrifos on brain development in young rats under controlled laboratory conditions for decades. These studies have shown that the chemical has devastating effects on the brain.

"Even at exquisitely low doses, this compound would stop cells from dividing and push them instead into programmed cell death," said Theodore Slotkin, a scientist at Duke University Medical Center, who has published dozens of studies on rats exposed to chlorpyrifos shortly after birth.

In the animal studies, Dr. Slotkin was able to demonstrate a clear cause-and effect relationship. It didn't matter when the young rats were exposed; their developing brains were vulnerable to its effects throughout gestation and early childhood, and exposure led to structural abnormalities, behavioral problems, impaired cognitive performance and depressive-like symptoms.

And there was no safe window for exposure. "There doesn't appear to be any period of brain development that is safe from its effects," Dr. Slotkin said.

Manufacturers say there is no proof low-level exposures to chlorpyrifos causes similar effects in humans. Carol Burns, a consultant to Dow Chemical, said the Columbia study pointed to an association between exposure just before birth and poor outcomes, but did not prove a cause-and-effect relationship.

Studies of children exposed to other organophosphate pesticides, however, have also found lower IQ scores and attention problems after prenatal exposure, as well as abnormal reflexes in infants and poor lung function in early childhood.

"When you weigh the evidence across the different studies that have looked at this, it really does pretty strongly point the finger that organophosphate pesticides as a class are of significant concern to child neurodevelopment," said Stephanie M. Engel, an associate professor of epidemiology at University of North Carolina at Chapel Hill.

Dr. Engel has published research showing that exposure to organophosphates during pregnancy may impair cognitive development in children.

But Dr. Burns argues that other factors may be responsible for cognitive impairment, and that it is impossible to control for the myriad factors in children's lives that affect health outcomes. "It's not a criticism of a study — that's the reality of observational studies in human beings," she said. "Poverty, inadequate housing, poor social support, maternal depression, not reading to your children — all these kinds of things also ultimately impact the development of the child, and are interrelated."

While animal studies can determine causality, it's difficult to do so in human studies, said Brenda Eskenazi, director of the Center for Environmental Research and Children's Health at the University of California, Berkeley.

"The human literature will never be as strong as the animal literature, because of the problems inherent in doing research on humans," she said.

With regard to organophosphates, she added, "the animal literature is very strong, and the human literature is consistent, but not as strong."

If the E.P.A. will not end use of the pesticide, consumer preferences may.

In California, the nation's breadbasket, use of chlorpyrifos has been declining, Dr. Eskenazi said. Farmers have responded to rising demand for organic produce and to concerns about organophosphate pesticides.

She is already concerned about what chemicals will replace it. While organophosphates and chlorpyrifos in particular have been scrutinized, newer pesticides have not been studied so closely, she said.

"We know more about chlorpyrifos than any other organophosphate; that doesn't mean it's the most toxic;" she said, adding, "There may be others that are worse offenders."

#### THE NEW YORK TIMES

**Under Fire, Climate Scientists Unite With Lawyers to Fight Back** 

By John Schwartz

May 15, 2017

Lawyers and scientists do not always get along, but some are now finding common cause in an effort to defend the integrity of science — especially climate science — in government and academia.

Climate scientists are feeling the heat as Republicans cement control of the executive branch and Congress. The Trump administration has already rolled back about two dozen environmental laws and regulations, dismissed members of an important science panel and taken down web pages giving information on climate change. Republicans in Congress have also brought pressure to bear on climate scientists.

Now scientists and lawyers are fighting back, with well-attended public demonstrations and legal action. The push included a recent conference that brought law professors from across the United States to New York for training to protect scientists who come under scrutiny.

Scientists have found themselves the targets of investigations from those who deny the evidence of climate change — most notably in the 2009 scandal known as Climategate, when hackers stole and released internal research discussions. Global warming denialists took comments out of context to allege widespread scientific fraud.

Subsequent efforts to mine internal emails have been undertaken by conservative organizations like the Energy and Environmental Legal Institute and Judicial Watch, as well as conservative public officials like Kenneth T. Cuccinelli II, a former Virginia attorney general.

When the Environmental Protection Agency removed the climate-related web pages, it announced that it was reviewing and revising portions of its website in ways "that reflect the agency's new direction under President Donald Trump and Administrator Scott Pruitt."

Judith Enck, a former top E.P.A. official who is critical of the agency's new direction, said its online presence "now looks like the National Mining Association website."

In Congress this month, two Republican representatives, Rob Bishop of Utah and Raúl R. Labrador of Idaho, sent a letter to Interior Secretary Ryan Zinke saying they would review climate change adaptation programs at his agency to examine the "effectiveness, management and levels of oversight" of the programs.

Other conservatives in Congress took aim at climate researchers well before the 2016 election. Representative Lamar Smith, a Texas Republican who is chairman of the House Science Committee, last year subpoenaed federal climate scientists whose work supporting the evidence of a warming planet shows what he has called a "suspect climate agenda."

Actions by the Trump administration have been met with anger, lawsuits and friend-of-the-court briefs. A group of former Obama administration lawyers has filed lawsuits seeking information about charges of bullying of civil servants and scientists who work on climate issues.

David M. Uhlmann, a law professor at the University of Michigan and a former top prosecutor of environmental crimes at the Justice Department, has taken part in several such efforts, including briefs filed before Mr. Trump took office. He said the work was important both as an attempt to preserve environmental progress and as a message to his students.

In November, many of his students expressed dismay over the election results "and their concern that everything they came to law school for no longer mattered," Professor Uhlmann said. "My message to them was, 'Everything you came to law school for matters more than ever before."

Other lawyers are stepping up to protect dozens of climate scientists who have been targeted by private conservative groups demanding their personal emails and other documents. The groups, which dispute the powerful evidence underlying climate change science, use the tactic to unearth embarrassing and inartful language in private correspondence and then publicize it.

Those filing the document requests say they are trying to ferret out politicized, sloppy science and fraud. David Schnare, an official at the Energy and Environmental Legal Institute, said, "The legislatures give the citizens a right to know, and for good reasons — and there are good reasons for citizens to find out what's going on." Mr. Schnare, who was a longtime E.P.A. employee, briefly served in the Trump administration's transition team at the agency; the group receives funding from the fossil fuel industry.

The tactic can be "a P.R. home run," said Andrew Dessler, a professor of atmospheric sciences at Texas A&M University who received one such demand in 2012. He said he recognized the filing as "a fishing expedition" intended to "find anything that makes climate scientists look foolish, or corrupt, or biased or stupid — anything that can cast doubt on climate science."

Dr. Dessler cited the Climategate emails, which included discussion of the work of Michael E. Mann, now a climate scientist at Pennsylvania State University, with phrases like "Mike's Nature trick" and a technique to "hide the decline," which conservative commentators publicized as proof of fraud in climate science.

The phrases, which were taken out of context, did not involve fraud, and several investigations have cleared the scientists of

allegations that they manipulated research to meet their predetermined expectations. Still, Climategate was used to smear the scientists; President Trump has cited the "horrible emails" as a reason for doubting the threat of climate change.

The law professors who came to New York for training attended classes taught by the Climate Science Legal Defense Fund.

The fund was created in 2012 in response to litigation by Mr. Cuccinelli that also involved Dr. Mann's emails. Dr. Mann would eventually win that case, but by then, the burdensome litigation had run up hundreds of thousands of dollars in legal bills for Dr. Mann and the University of Virginia, his employer at the time.

In light of those costs, the defense fund got its start. What had been an informal referral network for scientists facing legal pressure took on structure and financing. Mr. Trump's election has provided a boost to the defense fund, said Joshua Wolfe, a founder.

"We've been a bit overwhelmed by the number of checks that came in postelection," he said. And while he noted that "we didn't build the organization for the Trump era," the previous cases "really prepared the organization for the current set of challenges."

The New York conference kicked off an effort to build a nationwide network of legal aid providers. Participants heard lectures on open records laws and were warned that the climate fight could be brutal, with online harassment and death threats common for researchers.

One law professor attending the conference, Myanna Dellinger of the University of South Dakota, said her own environmental legal scholarship had prompted attacks from conservatives, so "if I could help others who might be in the same situation, I would like to do so."

Emphasizing that she spoke only for herself and not for her institution, she added: "It would be easy to sit and do nothing and write about tax law. But some of us have to do something."

#### **CNBC**

US Northeast states are devouring natural gas for electricity, and that's a problem for coal

By Javier E. David

May 14, 2017



Gas flare from an offshore oil rig platform.

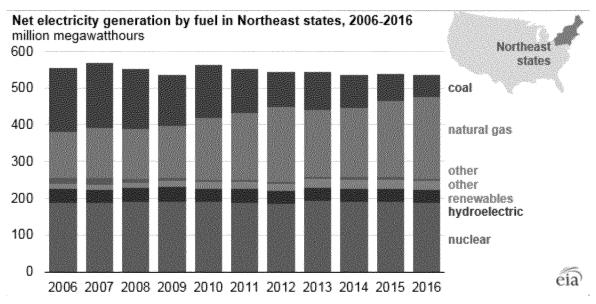
The Northeast U.S. states — a vast market that generates and consumes much of America's annual electricity — is gradually using less coal to fire up its electricity plants.

In part of what the Energy Information Administration called a dramatic 10-year shift, the nine states that comprise the Northeastern U.S.'s energy grid have collectively doubled the share of natural gas used to generate electricity—even as the region churned out slightly less power from 2006-2016. Simultaneously, coal-fired power tumbled from 31 percent to 11 percent, the EIA said in a report.

"Increased access to low-cost natural gas from the Marcellus Shale and other regional shale plays has driven the switch away from coal in the Northeast United States," the EIA said in a study last week. Analysts note that the cheaper and more plentiful natural gas becomes, the more incentive there is for producers to abandon coal.

"Environmental policies at the federal and regional level, such as production tax credits, the Regional Greenhouse Gas Initiative, and renewable portfolio standards, have also contributed to the decline in coal generation," the agency added.

Northeast 'a vanguard' of energy production



On a global scale, coal is still king, but its reign has become increasingly tenuous. The fuel source accounts for 41 percent of electricity generation worldwide, according to the World Coal Association, and in some countries that share is even higher. Massive demand from China — the world's largest energy consumer — has kept coal prices propped up higher.

Yet the Northeast's gradual migration to abundant natural gas — whose prices surged by more than 4 percent last week — is a reflection of its relative cheapness and comparatively beneficial environmental impact. Gas prices ended just shy of \$3.50 last week.

The shift away from coal and oil to natural gas has been credited with helping to reduce carbon emissions.

"Northeast states have been at the vanguard of the changes that are transforming how electricity is produced and delivered in the U.S.," noted a 2016 report by M.J. Bradley and Associates, an environmental consulting firm. "The region has already experienced a major shift in the mix of resources used to produce electricity, with natural gas and renewables displacing older coal- and oil-fired power plants."

The EIA report left little doubt about coal's inexorable downward trend: Pennsylvania remains a key hub of coal-fired power, but its capacity has tumbled by 31 percent over the last decade. Coal generation in both New York and Connecticut plummeted by 90 percent during that time, with both states shedding millions of kilowatt hours (kWh).

The coal to natural gas switch in the Northeast is a microcosm of a dynamic taking place worldwide, as natural gas steals an increasing share of the global power mix.

The International Energy Agency anticipates that the world's use of natgas could surge by more than 50 percent from 2010's levels, and eventually account for at least ¼ of global energy demand by 2035. In fact, an increasing number of idle coal plants are being retrofitted to produce natural gas.

Meanwhile, President Donald Trump's plan to boost infrastructure spending and spur an increase in domestic energy production is likely to boost natural gas' profile in the U.S. energy mix, observers say.

"Trump's presidency presents some downside [nat gas] price risks as it could speed up pipeline infrastructure, allowing for a faster supply expansion," Bank of America-Merrill Lynch analysts noted last week. Gyrations in coal prices will be determined mostly by Chinese demand, the bank added.

#### Greens to meet with White House on WOTUS

By Ariel Wittenberg

May 15, 2017

White House officials will meet with environmental groups this week and next to hear arguments for keeping the contentious Clean Water Rule in place.

Three environmental organizations have requested meetings with the White House Office of Information and Regulatory Affairs, which is currently reviewing a proposal from U.S. EPA and Army Corps of Engineers to rescind the Obama-era regulation that clarifies the reach of the Clean Water Act over small waterways and wetlands.

The Clean Water Rule, also known as the Waters of the U.S., or WOTUS, rule, has drawn fire from farmers, land developers and energy companies who say it amounts to government overreach.

Though WOTUS has been stayed by the 6th U.S. Circuit Court of Appeals, the Trump administration has made repealing and replacing the regulation a priority.

Environmental groups, however, have celebrated the regulation as providing critical protection to smaller waterways, which in turn protects larger ones.

OIRA officials will meet with the Natural Resources Defense Council on Wednesday, followed by the Theodore Roosevelt Conservation Partnership on Thursday and the Alliance of Nurses for Healthy Environments on May 25.

"Clean water is vital to human health, it is an essential part of it and making sure the administration realizes that health care providers think this is a vital regulation is key," said Katie Huffling, executive director of the Alliance of Nurses for Healthy Environments. "These regulations have significant positive impacts on public health, and there is a cost savings from that."

Text of the proposed regulation being reviewed by OIRA has not been released.

But EPA and Army Corps officials have said they will revert back to a 1986 regulation and 2008 guidance to define "waters of the United States" covered by the Clean Water Act while the agencies work on a new definition for the Trump administration.

Huffling said she does not expect to learn any additional details during her meeting but will present the case for keeping WOTUS in place.

"We feel like this current administration hasn't been taking the health benefits of these regulations into account, and so making sure they hear our message is really important," she said.

#### **GREENWIRE**

Flawed diesel engine testing takes deadly toll — study

By Sean Reilly

May 15, 2017

Diesel-powered cars and trucks spew millions of tons more nitrogen oxides than allowable standards, leading to tens of thousands of premature deaths worldwide each year, researchers conclude in a study published today.

The main cause: faulty testing regimens that don't reflect actual driving conditions, according to the study, which appears in the journal *Nature*.

In 2015, diesel vehicles released some 13.1 million tons of nitrogen oxides (NOx) — or more than 50 percent above the 8.6 million tons that would have resulted had those vehicles met emission standards.

NOx is a key ingredient in the formation of two major pollution scourges — ground-level ozone and particulate matter.

Globally, excess emissions are responsible for some 38,000 premature deaths annually, including about 1,100 in the United States alone, researchers found.

The latter figure is far higher than the 50 to 100 premature deaths blamed on the excess NOx from Volkswagen's cheating on emission tests.

While the German automaker's use of "defeat devices" has received a lot of attention, "our work emphasizes the existence of a much large problem," Daven Henze, one of the diesel study's co-authors and an associate mechanical engineering professor at the University of Colorado, Boulder, said in a news release.

"It shows that in addition to tightening emissions standards, we need to be attaining the standards that already exist in real-world driving conditions," he said.

In practice, vehicles spend much more time idling than test results indicate, Henze said in a follow-up interview this morning.

Other discrepancies show up in engine performance at low temperatures and high altitudes that "aren't captured in the hoops that the automakers make these cars jump through to get certified," he said.

Heavy-duty vehicles like large trucks and commercial buses account for about three-quarters of the excess emissions. Ozone is a lung irritant that can worsen emphysema symptoms and help trigger asthma attacks; particulate matter is associated with an array of heart and respiratory problems.

The paper drew on 30 previous studies of vehicle emissions under actual driving conditions in vehicle markets worldwide — including the United States, China and India — that represented 80 percent of new diesel vehicle sales in 2015.

Also involved in the research were participants from the International Council on Clean Transportation, the nonprofit organization that uncovered VW's cheating, and consulting firm Environmental Health Analytics LLC.

#### **INSIDE EPA**

# Utilities Invoke 2016 Ash Law In Call For EPA To Reconsider Disposal Rule

By David LaRoss

May 15, 2017

The utility sector is calling on EPA to reconsider its first-time rule governing coal ash disposal by saying a 2016 law that overhauled enforcement of the policy justifies reconsidering many of its technical mandates, but environmentalists counter that such changes would contradict Congress' decision to leave the rule's substantive provisions in place.

The Utility Solid Waste Activities Group (USWAG), which represents the power sector on waste management issues, filed a May 12 petition with EPA urging the agency to reconsider many provisions of the Obama administration's 2014 Resource Conservation & Recovery Act (RCRA) ash disposal rule. The rule as finalized set disposal requirements for handling coal ash, while the 2016 law changed its enforcement structure but left the disposal mandates intact.

USWAG says in the petition that EPA's justification for many of the rule's uniform national standards no longer applies, since Congress approved, and President Barack Obama signed, the Water Infrastructure Improvements for the Nation Act (WIIN) in 2016, which allows states to seek delegated authority to craft permit programs for ash disposal.

"With the WIIN Act's change to the implementation of the [coal ash] Rule, EPA's original rationale for excluding the site-specific, risk-based tailoring provisions from the Final Rule -- its concern for 'abuse' by entities operating under the self-implementing regime -- no longer exists. Therefore, the Rule should be amended as soon as possible," the petition says.

EPA crafted the rule to be self-implementing, relying on citizen suits rather than federal or state oversight to ensure compliance, and said it could not reasonably allow for site-specific exceptions from its mandates due to that lack of government oversight on how any exceptions would be used.

But environmentalists are countering that there is no justification for EPA to revisit the rule when Congress could have reworked the rule's requirements in WIIN, or directed the agency to do so, and chose to let it stand as written.

"To ask for reconsideration now upends what a recent Congress did," says one environmentalist.

And a second environmentalist says changing the rule would go farther than WIIN to potentially undermine its protections. "While on its face it did not alter the substance of the rule, [WIIN] did open the door wider for states to make those kinds of alterations" by crafting their own requirements in permit programs rather than duplicating EPA's mandates exactly, that source says.

The petition comes as EPA is crafting guidance for states on how to develop permit programs under WIIN -- which EPA Administrator Scott Pruitt announced while urging state regulators to quickly submit such programs for agency review and approval. It is unclear how that guide, or states' efforts to draft their permit programs, would be affected by an EPA decision to

reconsider the underlying rule.

#### Ash Rule

EPA's rule regulates ash, also known as coal combustion residuals (CCR), as a solid waste under subtitle D of RCRA -- rather than using hazardous waste subtitle C designations that environmentalists sought -- and sets technical and siting requirements for disposal facilities, including closure mandates for sites that cannot achieve compliance.

But USWAG is calling on EPA to reconsider many of those requirements, to extend deadlines for complying and to exempt sites where disposal is ended, continuing a long-standing and yet-unresolved legal argument over whether those "legacy sites" are subject to RCRA at all.

"They only thing they really don't want EPA to reconsider is the fact that this is regulated under subtitle D as solid waste," the first environmentalist says.

The utility group also says the agency should seek a hold on the lawsuit challenging the rule, known as *USWAG*, *et al.*, *v. EPA*, which is pending before the U.S. Court of Appeals for the District of Columbia Circuit. Briefing in the case finished in September 2016, but the D.C. Circuit has yet to set a date for oral argument.

USWAG's petition seeks reconsideration of a host of requirements in the 2014 rule, largely on the grounds that the WIIN act invalidated EPA's stated reasons for crafting an inflexible, nationally-applied policy.

Among other claims, it argues that the new law justifies changing groundwater monitoring requirements, the mandate for leaking facilities without a protective liner to close down automatically, and strict requirements for what constitutes a "protective" liner.

"Again, with the enactment of legislation authorizing the implementation of the CCR Rule through enforceable state CCR permits that can be tailored to take into consideration individual site conditions, EPA's reasoning no longer exists," USWAG says, referring to the closure mandate for unlined, leaking facilities.

#### Legacy Sites

But it also says EPA should reconsider the regulation of legacy sites as both a legal and policy matter, renewing arguments it and other industry groups have raised in the D.C. Circuit litigation that RCRA only applies to facilities where disposal is ongoing.

Further, it says, even if EPA still believes that RCRA can cover legacy sites, it should choose not to exercise that authority over coal ash disposal.

"[E]ven if some question remains on this jurisdictional issue (which USWAG believes that it does not for the reasons discussed below), the regulation of inactive CCR surface impoundments is clearly not mandated by the statute, but rather was a policy decision by the former EPA administration" that the Trump administration should reverse, the petition says.

The petition also asks for clarification on how the rule affects ash reuse and the procedures facilities can follow when shutting down, saying EPA should explicitly reject environmentalists' arguments that the existing regulatory text supports strict limits on both, despite what USWAG argues is EPA's original decision to give industry broad leeway in those areas.

## **INSIDE EPA**

Trump Taps Bodine, An Experienced Hand, To Lead EPA Enforcement Office

By Anthony Lacey

May 14, 2017

President Donald Trump announced late May 12 his intent to nominate former EPA waste chief Susan Bodine to lead the agency's enforcement office, tapping a Washington policy expert to provide key experience to Administrator Scott Pruitt's team and help advance several of Pruitt's priorities, including speeding Superfund cleanups and possibly returning some enforcement roles to agency program offices.

Bodine served as EPA waste chief under President George W. Bush and since January 2015 has been the chief counsel on the Senate Environment & Public Works Committee. Among Bodine's 29 years of environment law experience is her prior post at EPA, working at two law firms, and being the staff director and counsel for the House Transportation & Infrastructure Committee's water panel.

Her lengthy experience appears likely to be key, given Pruitt and his team's relative lack of EPA and Washington experience and some of the struggles they have faced advancing their agenda.

In a May 13 statement, Sen. John Barrasso (R-WY), the environment committee chairman, praised Bodine and said that she would give the EPA "strong and experienced leadership."

Vowing to hold a hearing on her nomination, Barrasso said that Bodine has extensive experience working both on Capitol Hill and previously in leadership at the EPA. "Susan is committed to finding commonsense ways to protect America's land, air, and water. In this new role, I know that she will work to help communities and small businesses comply with the law, while holding polluters accountable," he said.

Bodine has long been expected to win a significant role in the agency, though many believed she was in line to be selected as the agency's deputy administrator, a post that top White House officials have battled over and remains unfilled.

But her selection as assistant administrator for the agency's Office of Enforcement & Compliance Assurance (OECA), even before a deputy administrator is announced, suggests she will bolster Pruitt's priority of addressing Superfund cleanups.

#### Cleanups Priority

In a May 9 memo to the agency's Office of Land and Emergency Response chief and regional administrators, Pruitt said he is seeking to revitalize cleanup sites while promoting accountability and consistency across regions, according to the memo.

Superfund and the agency's land and water cleanup work "will be restored to their rightful place at the center of the agency's core mission," he said.

But how the agency will be able to do that given administration plans to slash Superfund spending remains in serious doubt.

For instance, the administration's budget plan for fiscal year 2018 seeks to cut EPA's budget by 31 percent -- reducing its funding from roughly \$8.1 billion to \$5.7 billion -- would lower the Superfund cleanup program's budget by 30 percent, which could complicate Pruitt's efforts to refocus the agency on prioritizing such cleanups.

That has already prompted concern from state regulators who say it would harm federal waste programs and "severely impact" environmental and public health protections and local economies, in some cases straining state programs so greatly that they risk returning delegated programs back to EPA.

If the Senate confirms Bodine, she will have to grapple with how to reconcile Pruitt's vowed push to address Superfund cleanups with the budget cuts for waste and enforcement spending.

In addition, the role of OECA remains unclear given reports that Pruitt is "seriously considering" shuttering the office and returning its functions to the program offices.

In addition, sources have said the budget cuts for EPA enforcement spending on delegated programs risk a race to the bottom on environmental compliance that could hamper state as well as federal enforcement and create competitive disadvantage for companies that comply with environmental law.

#### WASHINGTON POST

Defying Trump, these state leaders are trying to impose their own carbon taxes

By Chelsea Harvey

May 12, 2017

While the Trump administration continues to consider a withdrawal from the Paris agreement, climate action in the United States is increasingly falling to the state and local level. And now, a handful of states, mainly clustered in New England, are turning to the concept of carbon pricing with a renewed sense of urgency.

Legislators in at least five states, including Massachusetts, Rhode Island, Connecticut, Vermont and Washington, have recently introduced proposals that would reduce greenhouse gas emissions by placing a price on carbon in the form of a tax or fee. For most, this is at least the second time such legislation has been proposed. But with a growing national interest in carbon pricing schemes — including from some Republicans in Congress — sponsors say they're growing more optimistic about their proposals.

Carbon taxes aim to drive down greenhouse gas emissions by placing a tax or fee on either fossil fuel products or emissions -

things like gasoline. It's one of two major forms of carbon pricing, the other being a cap-and-trade system, which places a limit on the amount of carbon emissions industries can produce and establishes a market for the buying and selling of emissions permits.

There are two major cap-and-trade systems operating in the United States, one in the state of California and one regional cooperative system involving nine northeastern states. But so far, no carbon tax has ever been established at either the state or federal level in the country.

Now, leading the momentum in the Northeast is Massachusetts, where two separate carbon pricing bills — one in the House and one in the Senate — have a combined total of 80 sponsors, or about 40 percent of the state legislature. That's 32 more supporters than a similar proposal garnered after it was introduced in the state in 2015.

Success in Massachusetts could pave the way for success in other states. Both Rhode Island and Connecticut have included language in their own carbon-tax proposals making the legislation contingent on whether the Massachusetts carbon-tax bill goes into effect.

"Last year was an educational opportunity," said Rebecca Morris, communications director at the Massachusetts Campaign for a Clean Energy Future, which supported both the previous proposal and this year's new ones. "People were still learning about the concept, they were learning about the bill."

The previous bill met its end last year after its sponsor decided not to push forward with it, Morris said. But the increased support for this year's carbon-pricing legislation is a testament to a growing awareness of the concept, she suggested.

#### Lessons from past carbon-tax attempts

Economists have long argued that a carbon tax is likely one of the most effective means of reducing greenhouse gas emissions. And the strategy has seen success in other places. A carbon tax established in the Canadian province of British Columbia in 2008 has been widely hailed as one of the most successful examples of a carbon pricing scheme worldwide.

However, the idea has been slow to gain support in the United States, although awareness has grown significantly in the past few years. In 2015 and 2016, several states, including Massachusetts, saw carbon pricing bills introduced, and a carbon-tax proposal in Washington state made it all the way to the ballot in last November's election, although it ultimately failed to pass.

A major reason for the Washington bill's failure involved a fierce controversy among environmentalists over how the tax's revenue should be used. The legislation was designed to be revenue neutral, meaning it wouldn't produce any additional income for the state — instead, the extra money raised from the carbon tax would be used to lower the state's sales tax, as well as to fund a rebate for low-income families. However, some environmental and social advocacy groups felt that some revenue from the tax should be used to fund clean energy investments and other social and climate-related projects — and for this reason, some groups ultimately decided not to support the legislation.

In Massachusetts this year, one of the proposed carbon-pricing bills is revenue-neutral and the other is not, tackling both sides of the potential revenue debate. Both bills propose a fee starting at \$10 per ton of carbon dioxide and rising by \$5 a year until it hits a cap of \$40 per ton. But a bill introduced by state Sen. Mike Barrett would return 100 percent of the carbon fee's revenue back to households and businesses, while a bill proposed by state Rep. Jennifer Benson would use 20 percent of the revenue to fund green infrastructure and clean energy investments.

The two bills share many overlapping sponsors, although Barrett's bill has a few more supporters. That said, Barrett told The Washington Post, "I'll take a carbon price either way." For now, both bills remain in their earliest stages and have been referred to the Joint Committee on Telecommunications, Utilities and Energy, which is chaired by Barrett.

# A carbon tax bloc in the northeast?

Meanwhile in Rhode Island and Connecticut, the chances of a future carbon tax have also been pinned to the success of the Massachusetts legislation.

Connecticut's bill states that its provisions shall take effect upon "Massachusetts and Rhode Island enacting a fee on fossil fuels sold in said states at a rate of not less than ten dollars per ton." And in Rhode Island, the bill is dependent on a neighboring state with "an aggregate population of at least five million (5,000,000) persons" enacting similar legislation. Massachusetts is the only bordering state that exceeds this population, and the other border-sharing state is Connecticut.

According to the Rhode Island bill's sponsor, state Rep. Aaron Regunberg, the clause was born of concerns about Rhode Island potentially putting itself at a competitive disadvantage if it were to become the only state with an implemented carbon tax.

"Understanding the strength of those concerns, we included trigger language and we've been working with folks in Massachusetts and Connecticut and other states to try to be pushing this forward together," he told The Post.

It's an attitude reminiscent of the cooperative spirit that resulted in the Regional Greenhouse Gas Initiative, the northeastern capand-trade system that already includes Rhode Island, Massachusetts and Connecticut, as well as Delaware, Maine, Maryland, New Hampshire, New York and Vermont. In fact, because the RGGI already addresses emissions from the power sector, Morris noted that the new carbon-tax proposals make an exemption for the electricity sector.

Another chance in Washington state?

For its part, Washington state — still recovering from the defeat of last year's proposed legislation — has already seen four new carbon-tax bills proposed by various state legislators this year, all of which are in early stages as well. And state Rep. Diana Gonzalez of Vermont recently introduced a carbon-fee proposal that she's described as a "conversation starter."

Indeed, the emergence of these proposals across the nation may be taken as evidence that the conversation has already begun — and more lawmakers are beginning to join it. Even at the federal level, a surprising interest in carbon pricing has begun to surface among conservative policymakers, who have generally been opposed to the idea in the past.

In February, a group of senior Republican officials, some of whom had previously served in high-ranking positions in the Council of Economic Advisers, met with Trump administration officials to propose the idea of using a federal carbon tax, rather than top-down regulation, to address the issue of climate change. The idea quickly received endorsements from other notable Republican lawmakers, including Mitt Romney.

The White House has since stated it is no longer considering the proposal — but its newfound acceptance among some Republicans was a point of hope among environmentalists and additional testament to the idea that carbon pricing may, one day, lead the future of climate action in the United States.

For now, though, hopes for the first U.S. carbon tax remain pinned at the state level. The Carbon Tax Center suggests that seven states — Massachusetts, Washington, Connecticut, Hawaii, Maryland, Illinois and New York — and the District of Columbia have the greatest potential to be the first in the nation to implement such legislation. The analysis is based on factors like the states' vulnerability to climate change impacts, voter concern about the issue, state-level renewable energy initiatives and any legal, ideological or economic challenges that could prevent the legislation from moving forward.

While Massachusetts has made some strides in terms of support this year, the legislation's future still remains uncertain. According to Barrett, such proposals can have as long as an "eight-year lifetime," requiring several years just to raise awareness and drum up support for the issue. This is the second year he's introduced his proposal, but he says he's growing more hopeful.

"I'm making my way slowly, but I think successfully," he said. "And my hope is that the Senate, at least, will act in this 2017-2018 session. Then the pressure really builds on the House, the other branch — the more conservative branch, I might add. I think they want to see the Senate take the first step."

## **WASHINGTON POST**

Utilities group petitions EPA head to upend coal ash rule

By Michael Biesecker | Associated Press

May 12, 2017

A utilities group asked the Environmental Protection Agency on Friday to sweep away rules governing the disposal of the poison-laden ash left behind when coal is burned to generate electricity.

The Utility Solid Waste Activities Group filed a petition asking EPA Administrator Scott Pruitt to reconsider broad sections of the Coal Combustion Residuals Rule, saying the regulations are ill-conceived and burdensome.

The EPA chief has expressed his willingness to gut environmental regulations finalized under the Obama administration, especially if doing so aids the fossil fuel industry. Since his appointment, Pruitt has repeatedly moved to block or delay rules aimed at curbing air and water pollution from coal-fired power plants.

Like President Donald Trump, Pruitt denies the consensus of climate scientists that manmade carbon emissions are the primary driver of climate change.

The nation's coal-fired power plants produce tens of millions of tons of coal ash each year that contain such toxic heavy metals as arsenic, lead and mercury.

Much of the ash is in wastewater pumped into massive unlined pits near lakes and rivers potentially used as sources of drinking

water.

Following a series of highly-publicized spills, the EPA spent years developing new rules to produtilities to either recycle the ash or dispose of it more safely.

Environmentalists quickly criticized the petition, while grudgingly admitting the utilities stand a good chance of getting what they want from the Trump administration.

"These dumps should have been cleaned up decades ago," said Lisa Evans, a lawyer with the environmental advocacy group Earthjustice. "The new EPA safeguards were finally starting to make progress. ... Cutting back protections at this point would be reckless and would put people's health at risk."

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